

MEETING SUMMARY | October 24, 2012

Santa Rosa Plain Technical Advisory Committee

Meeting in Brief

TAC Continuing Review of Working Draft Water Resources Section

The TAC continued the iterative review process of the Water Resources Section (Section 2 of the GMP), focusing specifically on the narrative section, related figures and tables, and a color-coded table of contents. The group identified a range of topics for discussion and subsequently provided key considerations associated with each topic. All draft sections of the GMP will be updated with additional new data once the USGS report is published.

Data Needs, Gaps and Monitoring Methods

Members reviewed and built upon a general list of data needs and gaps distributed by the Project Team. The group also brainstormed methods of monitoring and data collection that reduce uncertainty in management planning and implementation. Publication of the USGS report will further highlight data needs and gaps in the Santa Rosa Plain.

Monitoring Working Group

The TAC formed a working group to advance the detailed aspects of the monitoring framework so upcoming meetings remain productive. The working group is not a decision making body. The group's efforts will be presented to the full TAC for discussion and refinement.

<http://www.scwa.gov/srgroundwater/>

Next Meeting

Upcoming TAC Meeting Dates: November 28 and December 12 (9:00-11:00), Sonoma County Water Agency office, 404 Aviation Blvd, Santa Rosa.

Action Items

Timeframe	Name	Action Item
Early November	Project Team	Distribute prep materials for first monitoring working group meeting
November 23	Project Team	Materials for November TAC meeting posted in dropbox

Updates and announcements

At an October 23 public hearing the Sonoma County Water Agency Board of Directors unanimously adopted a resolution to develop a groundwater management plan for the Santa Rosa Plain. A number of Panel members attended the meeting and made positive comments in support of the resolution.

Water Resources Section for Groundwater Plan

The TAC continued its initial review on the working draft Water Resources Section, focusing on section 2 (water resources), related figures and tables, and a color-coded table of contents. The review process is iterative in nature and all draft material will be updated with additional new data once the USGS report is published.

Preparing a sound understanding and presentation of water resources in the basin informs discussions about management. The management plan components aim to meet objectives defined in the GMP. Once implemented, the plan will undergo periodic review, where measured results are mapped against goals, objectives and success metrics and the plan is revised as needed.

The project team agreed to set up an online *dropbox* to post draft documents for review. TAC members will receive notifications of available documents and use the site to download material only. Members then follow the previously agreed to document review process and submit substantive editorial comments to the project team via email.

Member Feedback

The group discussed the technical content, level of detail and readability of the water resources sub-section, including relevant figures and tables. Members noted the following considerations for refining the working draft:

Sustainable yield

- Ensure that sustainable yield remains the primary goal of the plan
- Identify a reasonable time horizon to determine sustainable yield

Surface/groundwater interaction and recharge

- Explain surface and groundwater interaction
- Explain flood control and recharge interaction
- Include potential sources and locations of recharge and other forms of water storage
- Identify both current and historical recharge areas
- Consider the feasibility and location of recharge projects; include maps and figures
- Examine soil types and the relationship to recharge areas
- Utilize GIS overlays (land use, geology and soil type) to show recharge areas and potential for percolation
- Identify recharge trade offs
- Bolster the limited data in the surface water section

Water quality/contamination

- Monitor and test surface water quality during flooding, runoff and reuse of water
- Examine the relationship between pumping and water quality, including how the Russian river influences well production and water quality
- Determine threshold where salt nutrients exceed acceptable levels
- Consider the impact of aging wells
- Consider reverse osmosis discharge options and water purification (biological mechanisms) to remove contaminants from brine
- Examine the use of chlorine as a mechanisms for maintaining water quality
- Consider cost effective methods for reclamation and reuse

Water rights and use

- Analyze the interaction between rural, agricultural and city users
- Include a discussion on water rights and how to maintain them
- Ensure water allocation to diverse users (e.g. domestic, city, agriculture)
- Include plan for addressing water rights during drought periods
- Consider effects of plan implementation on non-stakeholders

Watershed

- Analyze the interaction between the Russian river and Laguna de Santa Rosa watersheds
- Consider the history of groundwater level drawdown in the Santa Rosa Plain

Table describing other projects

- Identify other water management projects and information germane to TAC efforts
- Consider inclusion of table in section 2.9
- Focus TAC efforts and avoid duplication of work
- Consider a clearinghouse of information on related studies and projects

Climate change

- Include a section with climate change scenarios

The project team will include additional maps in later iterations of the Water Resources Section. For example, recharge mapping is a required component and will be developed subsequent to publication of the USGS report.

Data Needs and Gaps

TAC members reviewed a general list of suggested data needs and subsequently identified additional needs, gaps and ways to reduce uncertainty in the monitoring and managing of groundwater in the Santa Rosa Plain. Publication of the USGS report will further highlight needs and gaps in the Santa Rosa Plain. As a starting point of discussion on the issue, members noted the following:

Additional data needs and gaps (beyond general list)

- Extraction data from private wells and agricultural water use, not just public wells
- Lessons learned (good practices) from effective groundwater management in other California locations
- Elastic and inelastic and land subsidence

Methods for reducing uncertainty

- Utilize past USGS method of curve fitting and calibration to assess potential climate change, however this presents a derived versus a measured estimate
- Collect and analyze historical tree ring data
- Investigate subsidence
- Generate data from past well logs
- Ensure use estimates are conservative when gathered from unmetered sources
- Monitor stream flow velocity; consider history of stream data
- Incorporate climate change modeling
- Look at multiple contamination sources (e.g. commercial); consider mercury levels in surface water
- Construct 3-dimensional geospatial representation of contamination levels
- Analyze the sustainability of wells (e.g. lifespan and economic viability)

Monitoring Working Group

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TAC Meeting Attendees

TAC Members

Matt O'Connor
Mark Calhoon
Gary Mickelson
Kevin Cullinen
Rocky Vogler
Dawna Gallagher
Lloyd Iverson
Jane Nielson
Joe Gaffney

Project Team

Project Manager, Marcus Trotta
Technical Consultant, Tim Parker
TAC Facilitator, Rich Wilson

TAC Visitors

Carl Adelman
Tom Hammond